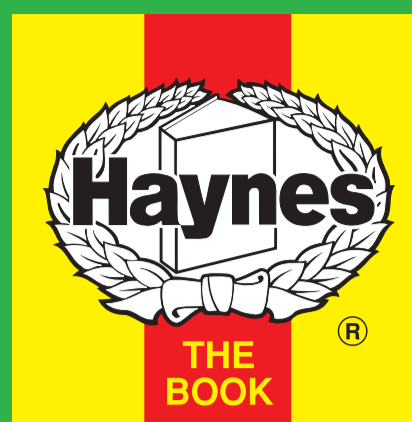


Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
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Automotive Technical DATA BOOK

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MENU

HELP

Engine and cooling system 200E, TE & CAT (124.021/081) 1988 to 1989

Type		102.963 KE 90kW Cat: 87kW
Capacity (cm ³) / number of cylinders		1997 / 4
Compression ratio / pressure	bar	9.1 / ≥8.5
Oil pressure	bar	0.3 [3.0]
Oil temperature	°C	–
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-3-4-2
No 1 cylinder position		F
Thermostat opening temperature	°C	87±2
Radiator cap pressure	bar	1.2±0.1

Fuel system 200E, TE & CAT (124.021/081) 1988 to 1989

Idle speed - manual [auto]	rpm	750±50
Fast idle speed - manual [auto]	rpm	–
CO @ idle speed [3000 rpm] - see page VI	%	1.0±0.5. CAT: ≤0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO ₂ @ idle speed [3000 rpm] - see page VI	%	–
O ₂ @ idle speed [3000 rpm] - see page VI	%	–
Carburettor / fuel injection		Bosch
Type / ref		CIS-E (KE-Jetronic)
Main jet / needle		–
Injection pressure	bar	≥3.0. 9.88 ▶: 3.2
Pump pressure	bar	5.3 to 5.5
Octane rating	RON	95[E 95 RON] ¹

Ignition system 200E, TE & CAT (124.021/081) 1988 to 1989

Type		EZL
Ignition coil		Bosch
Primary resistance	ohms	0.3 to 0.6
Ballast resistor	ohms	–
Voltage - Tmnl 15(+) to earth	V	Battery
Distributor		Bosch-Siemens
Points gap (air gap)	mm	–
Dwell angle	° (%)	9 to 49 @ starter speed
Condenser capacity	µF	–
Rotation		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	23 to 27 BTDC @ 3200
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	8 to 12 BTDC @ idle
	° Crankshaft @ rpm	36 to 40 BTDC @ 3200
	° Crankshaft @ rpm	–
Centrifugal check.	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	–
	° Crankshaft @ rpm	–
Vacuum range check	mbar	Computer control
Maximum vacuum advance	° Crankshaft	–
Spark plugs		Bosch/Champion
Type		H7DC / S9YC
Electrode gap	mm	0.80

Electrical system 200E, TE & CAT (124.021/081) 1988 to 1989

Battery	V / CC / RC	12 / 190 / 62Ah
Alternator voltage / full load current / engine rpm		13.0 to 14.5 / 70 / 3000
Starter motor current / voltage - cranking	A / V	75 / 11.5 (no load)
- locked	A / V	430 to 550 / 3.2

Running gear 200E, TE & CAT (124.021/081) 1988 to 1989

Brakes -		
Front (min. friction material thickness)	mm	3.5
Rear (min. friction material thickness)	mm	2.0

Tyres		
Saloon	Size	195/65x15: 205/60x15
Estate / Van	Size	195/65x15: 205/60x15
Pressure - front / rear - Saloon	bar	2.0 / 2.0
- Estate / Van	bar	2.0 / 2.5

Front suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	[+20'±10']
Camber		-25'+10'-20' ²
Castor		+10°25'±30' ³
King pin inclination		–

Rear suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	[+20' to 35']
Camber		-1°30'±30'

Torque wrench settings 200E, TE & CAT (124.021/081) 1988 to 1989

Cylinder head - stage 1	Nm	55 ⁴
- stage 2	Nm	+ 90°
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	–
Big-end bearings	Nm	30 + 90 to 100°
Main bearings	Nm	M12: 90° ⁵
Clutch cover	Nm	25
Flywheel [driveplate]	Nm	30 + 90 to 100°
Front hubs	Nm	WSM
Rear hubs	Nm	–
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	25 to 30

Capacities 200E, TE & CAT (124.021/081) 1988 to 1989

Engine oil & filter	litres	5.0
Gearbox - 4-speed [5-speed]	litres	1.3 [1.5]
Automatic transmission - refill	litres	5.5
Final drive	litres	0.7. ASD: 1.1
Cooling system	litres	8.5. A/c: 9.5
Fuel tank	litres	70. 200TE: 72

Notes and Illustrations

¹CAT: [U]

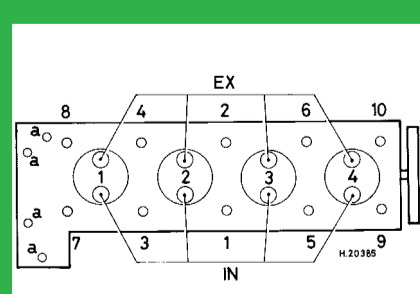
²200TE: -5'+10'-20'. Sport: -50'+10'-20'

³200TE: 10°10'±30'. Sport: +10°40'±30'

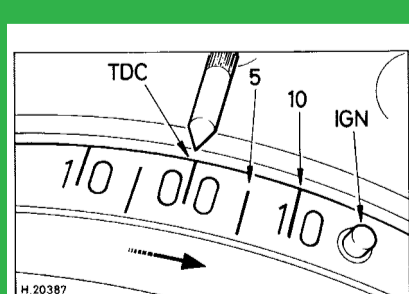
⁴Bolts marked "a" on diagram: 21

⁵M11: 55 + 90 to 100°

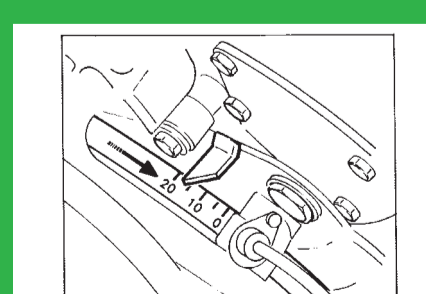
1: Idle speed 2: CO / Mixture



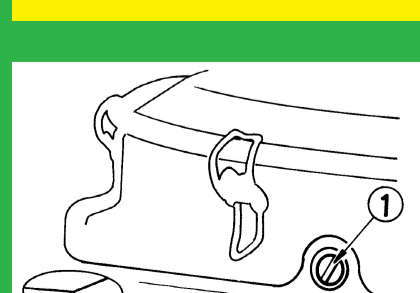
1997 cm³



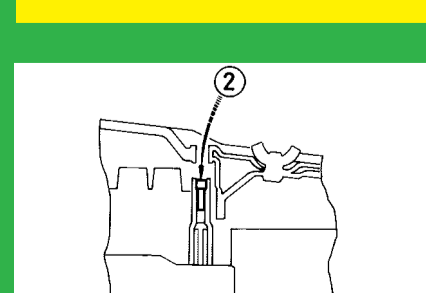
1997 cm³



1997 cm³, alternative



KE-Jetronic



KE-Jetronic